APPLICATIONS OF BAM TO OBTAIN OPTIMAL SOLUTIONS IN INDUSTRIAL PROBLEMS

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In most of the industries, the Director's or the Manager's job is to ensure that the workers devote adequate attention and put forward efforts towards the maximum production (production - means manufacturing of the goods) so that the industry at large runs with a maximum profit. However, on the view of workers they plan to get the maximum incentive for the work they do.

In this paper we design a method using fuzzy theory in general and Bi-directional Associative Memories in particular to obtain the optimal solution so that the industry enjoys profit and at the same time the industry provides maximum incentive to the workers or employees.
Since the study is to obtain an optimal solution or equivalently a sort of satisfaction from both sides, we felt that the use of Bi-directional Associative Memories (BAM) would give a better result. We collect the experts opinion from the industrialists as well as the feelings of the workers and using the data so got we process them by applying BAMs.

We input an initial vector, which represents the feelings of the workers in the regard of incentives, and obtain its resultant vector, which gives the position of the industry. Thus when we get the result as a fixed point we arrive at the optimal value. As the name suggests, it is Bi-directional Associative Memories and it can give equal weightage to feelings of both the employees and the employer.